

40th International Carrot Conference
Mount Vernon, Washington, U.S.A.
August 29-30, 2022



Monday, August 29

Agricultural Research & Technology Building,
WSU Mount Vernon Northwestern Washington Research &
Extension Center (NWREC)

- 7:30 am **Registration desk open, and morning refreshments**
- 8:15 am **Welcome and general announcements** – Lindsey du Toit, Vegetable Seed Pathologist and Chair of the Organizing Committee, WSU Mount Vernon NWREC
- 8:25 am **Welcome to the WSU Mount Vernon NWREC** – Carol Miles, Interim Director, WSU Mount Vernon NWREC
- 8:40 am **Agriculture in Northwestern Washington** – Brandon Roozen, Executive Director, Western Washington Agricultural Association
- 9:00 am **Keynote Presentation: experiences, learnings, and observations from 40+ years of carrot breeding** – Roger Freeman, Senior Breeder, Nunhems USA, Inc.
- 9:30 am **Break, morning refreshments sponsored by BASF Nunhems**
- 10:00 am **Creating connections, igniting inspiration and imagination, and having fun through Participatory Plant Breeding with carrots.** Laurie McKenzie and Micaela Colley
- 10:20 am **Results of the carrot SCRI project: New phenotypes, markers, and genes in carrot germplasm to deliver improved carrots to growers and consumers.** Phil Simon, David Spooner, Julie Dawson, Edgar Spalding, Sherry Tanumihardjo, Massimo Iorizzo, Phil Roberts, Allen Van Deynze, Theresa Hill, Daniel Sumner, Jas Sidhu, Lindsey du Toit, Timothy Waters, Micaela Colley, and Laurie McKenzie
- 10:40 am **Comparison of genotypic and phenotypic selection of breeding parents in a carrot (*Daucus carota*) germplasm collection.** K.E. Corak, R.K Genger, P.W Simon, and J.C. Dawson

- 11:00 am **Leveraging diverse carrot germplasm to deliver genetic markers and improved stand establishment to growers.** Jenyne Loarca, Julie Dawson, and Philipp Simon
- 11:20 am **Wild carrot germplasm sources of abiotic stress tolerance.** Phil Simon, William Rolling, Adam Bolton, Aneela Nijabat, Aamir Ali, A.T.M. Majharul Mannan, M. Abdur Rahim
- 11:40 am **Poster viewing**
- Noon **Lunch sponsored by Bayer Seminis**
- 1:00 pm **Efficient production of transgene-free, gene edited carrot plants via protoplast transformation.** C. M. Meyer, I. L. Goldman, E. Grzebelus, and P. J. Krysan
- 1:20 pm **Effects of planting density on carrot root shape and QTL identification of root shape traits in biparental populations.** Andrey Vega-Alfaro, Scott Brainard, Irwin Goldman
- 1:40 pm **Identification of an additional root-knot nematode (*Meloidogyne incognita*) resistance in a diverse collection of cultivated carrot (*Daucus carota* L.).** Kevser Ozel, William Rolling, Douglas Senalik, Thomas Horejsi, Shelby Ellison, William C. Matthews, Philip A. Roberts, Philipp W. Simon
- 2:00 pm **Non-fumigated nematicides for the management of root-knot nematodes in carrots.** Jaspreet Sidhu, Jed Dubose, and Jennifer Fernberg
- 2:20 pm **Poster session, interactive carrot tasting, and afternoon refreshments**
- 3:00 pm **How effective are mycorrhizae inoculants for improving yield and disease resistance in carrots?** Umbrin Ilyas, Lindsey du Toit, Manish Raizada and Mary Ruth McDonald
- 3:20 pm **The effect of seedborne *Xanthomonas hortorum* pv. *carotae* on seed germination and seedborne transmission of bacterial blight in carrot.** Jeremiah Dung and Jeness Scott
- 3:40 pm **Characterizing internal carrot leaf colonization patterns by *Xanthomonas hortorum* pv. *carotae*.** Eric Hobson, Eduardo Bernal, Lindsey J. du Toit, Jeremiah K. S. Dung, and Jonathan M. Jacobs
- 4:00 pm **The places *Xanthomonas* will go: Examining *Xanthomonas hortorum* pv. *carotae* in airborne debris and on non-carrot crops in central Oregon.** Katelyn Baldino, Matthew Huckins, Jeness Scott, Rob Stoll, Eric Pardyjak, Walter Mahaffee, and Jeremiah Dung

4:20 pm **Wrap-up & planning for the 41st International Carrot Conference**

4:40 pm **Break-out to discussion groups**

6:00 pm **Dinner at the NWREC sponsored by Vilmorin-Mikado**